

Substitute for form 1449A/PTO				Complete if Known	
				Application Number	10/586,501
				Filing Date	September 14, 2007
				First Named Inventor	Martin HENDRIX, et al.
				Art Unit	1624
				Examiner Name	Rao Deepak R.
Sheet	1	of	5	Attorney Docket Number	01-2118

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		2007/0161662 A1	07-12-2007	Martin HENDRIX, et al.	
		2006-0111372 A1	05-25-2006	Martin HENDRIX, et al.	
		2006/0106035 A1	05-18-2006	Martin HENDRIX, et al.	
		2006-0100222 A1	05-11-2006	Frank-Gerhard BOSS, et al.	
		2004/0266736 A1	12-30-2004	Frank WUNDER, et al.	
		2007/0105876 A1	05-10-2007	Martin HENDRIX, et al.	
		5,256,668	10-26-1993	Kuo-HOM, et al.	
		5,977,118	11-2-1999	Edward R. BACON, et al.	
		5,002,949	3-26-1991	Steven M. PESECKIS, et al.	
		3,732,225	05-08-1973	Hermann BREUER, et al.	
		3,165,520	01-12-1965	Paul SCHMIDT, et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)			
		CA 2 484 997 A1	04-22-2003	Bayer Cropscience AG	
		CA 2 417 631 A1	01-29-2003	Bayer Aktiengesellschaft	
		CA 2 438 890 A1	09-06-2002	Bayer Aktiengesellschaft	
		CA 2 496 194 A1	03-04-2004	Bayer Healthcare AG	
		CA 2 496 292 A1	04-01-2004	Bayer Healthcare AG	
		CA 2 496 308 A1	04-01-2004	Bayer Healthcare AG	
		CA 2 283 211 A1	09-17-1998	Bayer Aktiengesellschaft	
		CH 396 923	01-31-1966	CIBA Aktiengesellschaft	
		CH 396 924	01-31-1966	CIBA Aktiengesellschaft	
		CH 396 925	01-31-1966	CIBA Aktiengesellschaft	
		CH 396 926	01-31-1966	CIBA Aktiengesellschaft	
		CH 396 927	01-31-1966	CIBA Aktiengesellschaft	
		DE 1 153 023	08-22-1963	CIBA Aktiengesellschaft	
		DE 1 149 013	05-22-1963	CIBA Aktiengesellschaft	
		DE 2 408 906	09-19-1974	Chemische Fabrik von Heyden GmbH	
		DE 1 156 415	10-31-1963	CIBA Aktiengesellschaft	
		DE 101 56 249	05-28-2003	Bayer, AG	
		DE 1 147 234	04-18-1963	CIBA Aktiengesellschaft	
		EP 0 995 751 A2	04-26-2000	Pfizer Inc.	
Examiner Signature	/Deepak Rao/			Date Considered	04/11/2010

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /DR/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

2

of

5

Complete if Known

Application Number	10/586,501
Filing Date	September 14, 2007
First Named Inventor	Martin HENDRIX, et al.
Art Unit	1624
Examiner Name	Rao Deepak R.

Attorney Docket Number 01-2118

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		GB 937,726	09-25-1963	CIBA Limited		
		GB 973,361	10-28-1964	CIBA Limited		
		WO 02/055082 A1	07-18-2002	Vernalis Research Limited		
		WO 02/06288 A1	01-24-2002	F. Hoffmann-La Roche AG		
		WO 2004/018474 A1	03-04-2004	Bayer Healthcare AG		
		WO 2004/026286 A3	04-01-2004	Bayer Healthcare AG		
		WO 02/068423 A1	09-06-2002	Bayer Aktiengesellschaft		
		WO 02/09713 A2	02-07-2002	Bayer Aktiengesellschaft		
		WO 03/093269 A2	11-13-2003	Bayer Cropscience AG		
		WO 03/037899 A1	05-08-2003	Pfizer Limited		
		WO 03/041725 A2	05-22-2003	Bayer Aktiengesellschaft		
		WO 99/41253	08-19-1999	Tularik Inc.		
		WO 98/40384	09-17-1998	Bayer Aktiengesellschaft		
		WO 98/10765	03-19-1998	The Board of Trustees		
		WO 2004/026286 A2	04-01-2004	Bayer Healthcare AG		
		WO 2004/026876 A1	04-01-2004	Bayer Healthcare AG		
		WO 2004/026286 A1	04-01-2004	Bayer Healthcare AG		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		F. Josef van der STAAY, et al., "The novel selective PDE9 inhibitor BAY 73-6691 improves learning and memory in rodents", NEUROPHARMACOLOGY, 55 (2008) pp. 908-916	
		U. EBERT, et al., "Scopolamine model of dementia: electroencephalogram findings and cognitive performance", EUROPEAN JOURNAL OF CLINICAL INVESTIGATION, (1998) 28, pp. 944-949	
		Jos PRICKAERTS, et al., "Possible role of nitric oxide-cyclic GMP pathway in object recognition memory: Effect of 7-nitroindazole and zaprinast", EUROPEAN JOURNAL OF PHARMACOLOGY 337 (1997) pp. 125-136	
		F. Zaragoza DÖRWALD, "Side Reactions in Organic Synthesis", A GUIDE TO SUCCESSFUL SYSTEMS DESIGN, 2005, 4 pages	
		Kenneth F. PODRAZA, "Reductive Cyclization of Ketoesters Utilizing Sodium Cyanoborohydride: Synthesis of γ - and δ -Lactones" J. HETEROCLIC CHEM., 24, 193 (1987)	
Examiner Signature	/Deepak Rao/	Date Considered	04/11/2010

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /DR/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

3

of

5

Complete if Known

Application Number	10/586,501
Filing Date	September 14, 2007
First Named Inventor	Martin HENDRIX, et al.
Art Unit	1624
Examiner Name	Rao Deepak R.

Attorney Docket Number

01-2118

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Internet Article, "Amnesia", From Wikipedia, the free encyclopedia, 3 pages (2008) .	
		Reid IA, "Role of phosphodiesterase isoenzymes in the control of rennin secretion: effects of selective enzyme inhibitors", CURR PHARM DES, 1999, Sep; 5(9): 725-35	
		Edwin J. WEEBER, et al., "Molecular Genetics of Human Cognition", MOLECULAR INVENTIONS, Vol. 2, Issue 6, October 2002, pps. 376-391	
		International Search Report for International Application No. PCT/EP2004/004455 mailed September 17, 2004, 8 pages	
		International Search Report for International Application No. PCT/EP2004/004412 mailed July 14, 2004, 6 pages	
		International Search Report for International Application No. PCT/EP03/08979 mailed November 25, 2003, 8 pages	
		International Search Report for International Application No. PCT/EP03/08923 mailed December 15, 2003, 6 pages	
		International Search Report for International Application No. PCT/EP2004/006477 mailed October 27, 2004, 8 pages	
		International Search Report for International Application No. PCT/EP2004/014872 mailed May 19, 2005, 10 pages	
		Scott H. SODERLING, et al., "Identification and Characterization of a Novel Family of Cyclic Nucleotide Phosphodiesterases", THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 273, No. 25, Issue of June 19, 1998, pgs. 15553-15558	
		Scott H. SODERLING, et al., "Regulation of cAMP and cGMP signaling: new phosphodiesterases and new functions", CURRENT OPINION IN CELL BIOLOGY, 2000, 12:174-179	
		Svetlana G. ANDREEVA, et al., "Expression of cGMP-Specific Phosphodiesterase 9A mRNA in the Rat Brain", THE JOURNAL OF NEUROSCIENCE, November 15, 2001, 21(22); pgs. 9068-9076	
		C. C. CHENG, et al., "Potential Purine Antagonist VII. Synthesis of 6-Alkylpyrazolo-[3,4-d]pyrimidines ^{12a} ", POTENTIAL PURINE ANTAGONISTS, VII, Vol. 23, February 1958, pgs. 191-200	
		Lindsay FAWCETT, et al., "Molecular cloning and characterization of a distance human phosphodiesterase gene family: PDE11A", PNAS, Vol. 97, No. 7, March 28, 2000, pgs. 3702-3707	
		Douglas A. FISHER, et al., "Isolation and Characterization of PDE9A, a Novel Human cGMP-specific Phosphodiesterase", THE JOURNAL OF BIOLOGICAL CHEMISTRY, Vol. 273, No. 25, Issue of June 19, 1998, pgs. 15559-15564	
Examiner Signature	/Deepak Rao/	Date Considered	04/11/2010

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /DR/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

4

of

5

Complete if Known	
Application Number	10/586,501
Filing Date	September 14, 2007
First Named Inventor	Martin HENDRIX, et al.
Art Unit	1624
Examiner Name	Rao Deepak R.
Attorney Docket Number	01-2118

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

5

of

5

Complete if Known

Application Number	10/586,501
Filing Date	September 14, 2007
First Named Inventor	Martin HENDRIX, et al.
Art Unit	1624
Examiner Name	Rao Deepak R.

Attorney Docket Number

01-2118

NON PATENT LITERATURE DOCUMENTS

	K. Hemender REDDY, et al., "Versatile synthesis of 6-alkyl/aryl-1H-pyrazolo[3,4-d]pyrimidin-4[5H]-ones", INDIAN JOURNAL OF CHEMISTRY, Vol. 31B, March 1992, pgs. 163-166	
	Magnus ROENN, et al., "Palladium (II)-Catalyzed Cyclization Using Molecular Oxygen as Reoxidant", TETRAHEDRON LETTERS, Vol. 36, No. 42, 1995, pgs. 7749-7752	
	Guy J. ROSMAN, et al., "Isolation and Characterization of human cDNAs encoding a cGMP-stimulated 3',5'-cyclic nucleotide phosphodiesterase", GENE, Vol. 191, 1997, pgs. 89-95	
	P. SCHMIDT, et al., "A new synthesis of pyrazolo [3,4-d] pyrimidines having coronary dilation properties", HELVETICA CHIMICA ACTA, Volume XLV, fascicule V (1962) No. 189, pgs. 1620-1627	
	Arne SCHOUSBOE, et al., "Role of CA ⁺⁺ and Other Second Messengers in Excitatory Amino Acid Receptor Mediated Neurodegeneration: Clinical Perspectives", CLINICAL NEUROSCIENCE, Vol. 4, 1997, pgs. 194-198	
	Joachim ULRICH, "Crystallization", KIRK-OTHMER ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY, August 16, 2002, 7 pages	
	Anthony R. WEST, "Solid Solutions", Department of Chemistry University of Aberdeen, March 3, 1988, 3 pages	
	Sudha R. VIPPAGUNTA, et al., "Crystalline Solids", ADVANCED DRUG DELIVERY REVIEWS, Vol. 48, 2001, pgs. 3-26	
	Ji-Ye WEI, et al., "Molecular and Pharmacological Analysis of Cyclic Nucleotide-Gated Channel Function in the Central Nervous System", PROGRESS IN NEUROBIOLOGY, Vol. 56, 1998, pgs. 37-64	
	Internet Article, "Dementia", Information from the Mental Health Foundation, March 19, 2008, 3 pages	

Examiner Signature	/Deepak Rao/	Date Considered	04/11/2010
--------------------	--------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /DR/